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PATENT
ATTORNEY DOCKET NO.: INVIT1140-3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Fernandez et al.	Art Unit:	Not yet assigned
Application No.:	10/003,021	Examiner:	Not yet assigned
Filed:	November 14, 2001		
Title:	LIBRARIES OF EXPRESSIBLE GENE SEQUENCES		

Commissioner for Patents
Washington, DC 20231

TRANSMITTAL SHEET

Sir:

Transmitted herewith for the above-identified application please find:

1. Supplemental Amendment (8 pages);
2. Check No. 509024 in the amount of $108.00; and
3. Return Receipt Postcard.

CERTIFICATION UNDER 37 CFR §1.8
I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, May 14, 2002, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.
Aldon Griffis *(Name of Person Mailing Paper)*
Aldon Griffis *(Signature)* May 14, 2002 *(Date)*

Gray Cary\GT\6293872.1
102894-43

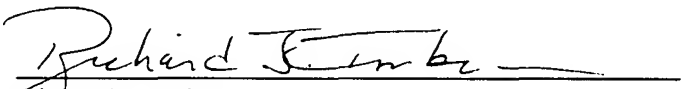
The Fee for this Response is calculated as follows:

For	Claims Remaining After Amendment	Highest Number Previously Paid For	Extra Claims	Small Entity Rate	Large Entity Rate	Calculations
Total Claims	26	20	6	x $09	x $18	$ 108.00
Independent Claims	3	3	0	x $42	x $84	$ .00
Multiple Claims				$140	$280	$ .00
Basic Filing Fee				$370	$740	$ .00
					TOTAL FEE	$108.00

Enclosed is Check No. 509024 in the total amount of $108.00; which consists of the fee for 6 additional claims over 20 total claims. The Commissioner is hereby authorized to charge any other fees associated with the filing submitted herewith, or credit any overpayments to Deposit Account No. 50-1355. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Date: May 14, 2002



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SUPPLEMENTAL PRELIMINARY AMENDMENT

Sir:

In connection with the above-identified Patent Application, and further to the Preliminary Amendment filed with the subject application on November 14, 2001, entry of the amendments and consideration of the following remarks respectfully are requested.

CERTIFICATION UNDER 37 CFR §1.8
I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, **May 14, 2002**, in an envelope addressed to: Commissioner for Patents, Washington, DC 20231.
Aldon Griffis *(Name of Person Mailing Paper)*
Aldon Griffis — May 14, 2002 *(Signature)* *(Date)*

Gray Cary\GT\6291630.1
102894-43

I. AMENDMENTS

Please cancel claim 1 without prejudice.

Please add the following new claims:

--41. An isolated expression vector, comprising a recombinant nucleic acid molecule, which comprises SEQ ID NO:1 linked immediately 5' to a start codon of an open reading frame (ORF).

42. The expression vector of claim 41, wherein the ORF encodes a full length polypeptide.

43. The expression vector of claim 41, and wherein the ORF lacks a stop codon.

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44. The expression vector of claim 41, wherein the ORF is linked in-frame to a polynucleotide encoding a heterologous peptide, thereby encoding a fusion protein comprising a polypeptide encoded by the ORF and the heterologous peptide.

45. The expression vector of claim 44, wherein the heterologous peptide comprises an affinity purification tag or an epitope tag.

46. The expression vector of claim 44, wherein the heterologous peptide comprises a polyhistidine tag, a chitin binding domain, glutathione-S-transferase, biotin, or a V5 epitope.

47. The expression vector of claim 44, further comprising a polynucleotide encoding an endopeptidase recognition sequence linked in-frame between the ORF and the polynucleotide encoding the heterologous peptide.

48. The expression vector of claim 41, which is a eukaryotic expression vector or a prokaryotic expression vector.

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49. The expression vector of claim 41, which is suitable for prokaryotic expression and eukaryotic expression.

50. The expression vector of claim 41, which is suitable for expression in bacteria cells, fungi, insect cells, yeast cells, plant cells, or mammalian cells.

51. The expression vector of claim 41, further comprising a promoter, an enhancer sequence, a selection marker sequence, an origin of replication, an epitope-tag encoding sequence, an affinity purification-tag encoding sequence, or a combination thereof.

52. The expression vector of claim 51, wherein the promoter is a constitutive promoter or an inducible promoter.

53. The expression vector of claim 52, wherein the constitutive promoter is a T7 promoter, a β-lactamase gene promoter, a bacteriophage λ int promoter; a chloramphenicol acetyl transferase gene promoter, an SV40 promoter, an RSV promoter or a CMV promoter.

54. The expression vector of claim 52, wherein the inducible promoter is a trp promoter, a recA promoter, a lacZ promoter, a lacI promoter, an araC promoter, an α-amylase promoter, a metallothionein I gene promoter, a herpesvirus TK promoter, an SV40 early promoter, a yeast gal1 gene promoter, an EF1 promoter, or an ecdysone-responsive promoter.

55. The expression vector of claim 51, wherein the selection marker confers resistance to ampicillin, tetracycline, kanamycin, bleomycin, streptomycin, hygromycin, neomycin, or Zeocin™ antibiotic.

56. The expression vector of claim 51, wherein the selection marker is a hisD gene sequence or a URA3 sequence.

57. The expression vector of claim 51, wherein the origin of replication (ori) is an *Escherichia coli* oriC ori, a yeast 2μ ori, a yeast ARS ori, and sf1 ori, or an SV40 ori.

58. A library of expression vectors, comprising a plurality of expression vectors, wherein each expression vector comprises a recombinant nucleic acid molecule, wherein each recombinant nucleic acid molecule comprises SEQ ID NO:1 linked immediately 5' to a start codon of an open reading frame (ORF), and wherein an ORF of an expression vector in the plurality is the same or different from open reading frames of other expression vectors in the plurality.

59. A nucleic acid expression library, comprising a plurality of expressible open reading frames (ORFs), wherein each open reading frame (ORF) in the library:

a) comprises a CACC nucleotide sequence linked immediately 5' to an ATG start codon of the ORF,

b) encodes a full length polypeptide, and

c) lacks a stop codon.

60. The nucleic acid expression library of claim 59, wherein the CACC nucleotide sequence comprises SEQ ID NO:1.

61. The nucleic acid expression library of claim 59, wherein the plurality of ORFs encode bacterial polypeptides, yeast polypeptides, fish polypeptides, mammalian polypeptides, or plant polypeptides.

62. The nucleic acid expression library of claim 61, wherein the mammalian polypeptides are human polypeptides or mouse polypeptides.

63. The nucleic acid expression library of claim 59, wherein the plurality of ORFs encode yeast proteins or human proteins.

64. The nucleic acid expression library of claim 59, wherein the plurality of ORFs encode kinases, phosphatases, transcription factors, oncogenes, or tumor suppressors.

65. The nucleic acid expression library of claim 59, wherein each ORF of the plurality further comprises an expression vector, and wherein the expression vector comprises a promoter, an enhancer sequence, a selection marker sequence, an origin of replication, an epitope-tag encoding sequence, an affinity purification-tag encoding sequence, or a combination thereof.

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66. The nucleic acid expression library of claim 65, wherein the expression vector is suitable for prokaryotic expression or eukaryotic expression.--